IN THE CLAIMS:

Kindly amend the claims as follows:

1. (Canceled)

2. (Previously Presented) A method of applying and disconnecting an unavoidable load to a communications circuit, the method comprising the steps of:

gradually one of applying and disconnecting the unavoidable load to the communications circuit without data disruption,

wherein said unavoidable load is presented by a monitor access, and said applying step comprises:

gradually applying a variable impedance element to the communications circuit;

connecting said monitor to the communications circuit; and

gradually removing said variable impedance element from the communications circuit such that said monitor is connected to the communications circuit without data disruption.

3. (Original) The method according to claim 2, wherein said disconnecting step comprises:

gradually applying said variable impedance element to the communications circuit;

disconnecting said monitor from said communications circuit; and

gradually removing said variable impedance element from the communications circuit such that said monitor is disconnected from the communications circuit without data disruption.

4. (Original) The method according to claim 2 or 3, wherein said variable impedance element includes at least one of a variable resistance element, a variable

inductance element, a variable capacitance element, a variable mutual coupling transformer, and a variable mutual coupling distributed element.

5. (Original) The method according to claim 4, wherein said variable impedance element is variable photoresistor, and the applying step comprises:

opening a relay which connects said monitor access to the communications circuit, such that no bridging loading of the circuit is presented;

gradually illuminating said variable photoresistor and applying a bridged load on the communications circuit, said load reaching a maximum when a minimum photoresistance is obtained, said minimum photoresistance approximating a short;

closing the relay, such that no effect on the bridged load is presented to the circuit due to said illuminated variable photoresistor having reached said minimum photoresistance, and connecting the monitor access to the communications circuit;

removing gradually the illumination of said photoresistor such that the monitor access is completed to the circuit without disturbance, as the photoresistance reaches a maximum value in the absence of illumination.

6. (Original) The method according to claim 5, wherein the disconnecting step comprises:

gradually illuminating the variable photoresistor and applying a bridged load on the communications circuit, said load reaching a maximum when said minimum photoresistance is obtained, said minimum photoresistance approximating a short;

opening the relay, such that there is no effect on the bridged load that is presented to the circuit due to said illuminated variable photoresistor having reached said minimum photoresistance, and disconnecting the monitor access from the communications circuit; and

removing gradually the illumination of the photoresistor until the monitor access is removed from the circuit without disturbance, as the photoresistance reaches a maximum value in the absence of illumination.

7. - 8. (Canceled)

9. (Previously Presented) The method according to claim 2, further comprising controlling the impedance versus time, of the variable impedance element.

10. – 18. (Canceled)

19. (Original) An apparatus for applying and removing a monitor access to a communications circuit, comprising:

a variable photoresistor illuminated by a controllable light source;

a relay connected to said photoresistor;

a monitor amplifier connected to said relay;

wherein when said variable photoresistor is gradually illuminated and imposes a predetermined load on the communications circuit, said relay can be operated to connect said monitor amplifier to the communications circuit without data disruption.

20. (Original) An apparatus for applying and removing a monitor access to a communications circuit, comprising:

a pair of variable photoresistors;

a pair of resistors coupled to said pair of photoresistors;

a monitor amplifier connected to said photoresistors and said circuit;

wherein when said variable photoresistors are gradually illuminated, said resistors in conjunction with said monitor amplifier impose a bridging load on the circuit, such that said monitor amplifier can be connected to said communications circuit without data disruption.

21. – 22. (Canceled)

23. (Previously Presented) The method of claim 2, wherein each direction of information flow in the communications circuit can be separately observed.

24. (Previously Presented) The method of claim 2, wherein the communications circuit comprises a digital subscriber loop (DSL).

25. (Previously Presented) The method of claim 2, wherein the communication circuit comprises at least one of a fiber optic data circuit, a wireline data circuit, and a waveguide data circuit.

26. (Previously Presented) The method of claim 25, wherein the wireline data circuit comprises at least a digital subscriber loop, a duplex transmission scheme, and modem means continuously adaptive to slow transmission media parametric changes.